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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,898	12/31/2003	Paul J. Buras	API-1022-COS-921	8912
25264	7590	06/20/2006	EXAMINER	
FINA TECHNOLOGY INC			BRUNSMAN, DAVID M	
PO BOX 674412			ART UNIT	
HOUSTON, TX 77267-4412			PAPER NUMBER	

1755

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/749,898	BURAS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	David M. Brunsman	1755	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20031231</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 and 12-29 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for inventions wherein the H<sub>2</sub>S scavenger is selected from zinc oxide, copper oxide and magnesium oxide, does not reasonably provide enablement for the broad range of metal salts set forth in the independent claims. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. The instant specification is quite clear that the invention is more than simply adding any known H<sub>2</sub>S scavenger to an asphalt composition, including comparative examples using other compositions known in the art as H<sub>2</sub>S scavengers that are unsatisfactory. The instant specification explicitly demonstrates that these three species fulfill the basic and novel characteristics of the instant but, fails to supply evidence or reasoning that would indicate which other compounds would be expected to exhibit the necessary performance. Furthermore, the instant specification strongly suggest the problem solved with respect to the instant invention is limited to polymer-modified asphalt compositions including a crosslinking agent which including sulfur as part of a compound or in elemental form.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 6, 9, 11 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The phrase "acceptable to OSHA" is indefinite in that it fails to set forth under which conditions acceptable is to be determined, it fails to set forth the relevant statute and regulations by which OSHA's acceptance is sought and, it fails to account for the ever changing scope and content of regulation under OSHA. The term "sulfur-containing derivative" is indefinite in that it fails to set forth the precursor from which it is derived, the part of the original component that is to be retained in the "derivative" or the extent to which the original material may be modified yet fall within the scope of "derived". The limitation wherein the amount of asphalt is "at least 5 lbs" is indefinite with respect to claims based on the proportions of components. Further, it is unclear what material difference exists in a composition of method of its making that is dependent on the physical amount thereof. For example, the properties of a steel alloy are the same whether it is present in the amount of a single ounce or 100 tons. The phrase "10 times more than that normally used" renders a claim indefinite in failing to set forth the amount "normally" used or the conditions that comprise "normal" usage.

Note, the instant claims are construed in examination consistent with their broadest reasonable interpretation. For example, the preamble recitation of "a method for reducing hydrogen sulfide emissions" is a statement of intent and claims thereto are anticipated by any teaching of the same process steps whether or not the prior art intended to reduce H<sub>2</sub>S emission solely or in part or even recognized the possibility thereof. A process part of the public domain may not be captured as an exclusive right simply by the recognition of an unrealized advantage thereto. Similarly, a "method of reducing the formation of pyrophoric iron pyrite" effectively comprising combination of a known additive in a vessel is anticipated even if that advantage is not realized but an unavoidable result of a prior art process.

The prior art cited is representative of a large body of prior art disclosing the addition of materials such as zinc oxide to asphalt compositions.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-22 and 25-29 are rejected under 35 U.S.C. 102(a or e) as being anticipated by US 6767939.

The reference teaches a method of making an asphalt composition useful to be combined with aggregate for paving roads comprising combining asphalt, a styrene butadiene polymer modifier, MBT, zinc oxide and elemental sulfur. While the zinc oxide is intended as a crosslinking promoter it is present in amounts which anticipate the ranges of the instant claims. See Table 5 (disclosing ingredients in amounts anticipating the instant claims) and the patented claims. The reduction in hydrogen sulfide emissions and iron pyrite formation, as the zinc oxide is present in amounts taught by the instant invention, would be expected to necessarily result therefrom. The examples therein further disclose a method of compatibility testing wherein the combined asphalt heated cast into cylindrical molds removed and cut into multiple pieces. This process anticipates the process of claim 27 wherein, physically removing the asphalt from a location, reducing its size, heating the asphalt and adding the H<sub>2</sub>S scavenger is explicitly claimed "in any order".

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Claims 1-22, 25, 26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5104916.

Column 4, lines 6-43 of the patent teach a method of forming an asphalt for use with aggregate in paving roads comprising mixing asphalt with a styrene butadiene polymer modifier and 0.1-2% of a vulcanization composition comprising, for example, 1 part tetramethylthiuram disulfide, 5 parts zinc oxide, 3 parts stearic acid and 1 part antioxidant. The reduction in hydrogen sulfide emissions and iron pyrite formation, as the zinc oxide is present in amounts taught by the instant invention, would be expected to necessarily result therefrom.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6767939, as applied above.

The use of asphalt compositions is admitted to be prior art in the instant specification. The difference between that use and the instant claims is the composition of the asphalt employed. US 6767939 teach that the compositions therein including zinc oxide exhibit better high temperature performance than untreated asphalt. It would have been obvious to one of ordinary skill in the art to employ the asphalt composition of 6767939 in a process of coating roofs because one of ordinary skill in the art would expect better high temperature performance.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5104916, as applied above.

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The use of asphalt compositions is admitted to be prior art in the instant specification. The difference between that use and the instant claims is the composition of the asphalt employed. US 5104916 teach that the compositions therein including zinc oxide exhibit better high temperature performance than untreated asphalt. It would have been obvious to one of ordinary skill in the art to employ the asphalt composition of 6767939 in a process of coating roofs because one of ordinary skill in the art would expect better high temperature performance.

Claims 1, 4-8, 10, 12, 13, 14, 17-19, 21-26 and 29 of this application conflict with claims 1-3, 7, 9 26, 41-43 and 49 of Application No. 10/749259. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Claims 1, 4-8, 10, 12-14, 17-19, 21-26 and 29 of this application conflict with claims 22, 23, 28, 32, 36 and 41 of Application No. 10/888563. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Claims 1, 4, 5, 17 and 21-29 of this application conflict with claims 11, 20, 31-33, 43 and 45-47 of Application No. 10/972022. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason

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for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Claims 1, 4-8, 10, 12-14, 17, 18 and 21-29 of this application conflict with claims 1-4, 7, 9, 11, 14-18 and 20-22 of Application No. 11/020774. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Claims 1, 3, 4, 5, 17, 21 and 26 of this application conflict with claims 1, 2, 7, 9, 14 and 16 of Application No. 11/250665. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1, 4-8, 10, 12, 13, 14, 17-19, 21-26 and 29 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over



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claims 1-3, 7, 9 26, 41-43 and 49 of copending Application No. 10/749259. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 1 of the instant application fully encompasses claim 1 of 749259. Claim 4 of the instant application further differs only in the range of "metal salt" added but, shares a common endpoint of 0.05%. Instant claim 5 anticipates claim 3 of 749259 in that it shares zinc oxide in the Markush group. Instant claims 6, 7, 10 and 12 fully encompass claim 7 of 749259. Instant claim 8 fully encompasses claim 9 of 749259, Instant claim 13 is anticipated by claim 2 of 749259 in that each oxide of claim 13 is recited in claim 2. Instant claim 14 fully encompasses claim 9 of the 749259. Instant claims 17, 18 and 19 are anticipated by claims 1, 7 and 9, respectively, of 749259 in that claim 1, 7 and 9 recite each of the metal oxides of claim 17, 18 and 19. Instant claim 21 fully encompasses claims 26, 43 and 49 of 749259. Instant claims 22 and 23 fully encompass claims 41 and 42 of 749259. Instant claim 24 and 25 fully encompass claims 42 and 41, respectively of 749259 in that a "roof sealed with asphalt" and " a road made from asphalt" immediately and unavoidably disclose the method of sealing a roof comprising spreading asphalt over at least part of it and the method of road building comprising using it to form a road. Instant claim 26 fully encompasses claim 1 of 749259. Instant claim 29, fully encompasses claim 41 of 749259 as the recitation of a road comprising asphalt and aggregate unavoidable envisions asphalt coated aggregate.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 4-8, 10, 12-14, 17-19, 21-26 and 29 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 22, 23, 28, 32, 36 and 41 of Application No. 10/888563. Although the conflicting claims are not identical, they are not patentably distinct from each other.

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Instant claims 1 and 4-7 each fully encompass claims 22 and 32 of 888563 in that the terms *about* 0.05 and *about* 0.04 are indistinguishable. Instant claim 8 is disclosed by claims 22 and 32 of 888563, in that the ranges of crosslinker in each claim overlap and there is no showing of record of the criticality of the nonoverlapping portion of the ranges of the instant claims. Instant claims 10, 12 and 13 fully encompass claims 22 and 32 of 888563. Instant claim 14 is disclosed by claims 23 and 36 of 888563, in that the ranges of crosslinker in each claim overlap and there is no showing of record of the criticality of the nonoverlapping portion of the ranges of the instant claims. Instant claims 17 and 18 fully overlap claims 22 and 32 of 888563. Instant claim 19 is disclosed by claim 9 of 888563, in that the ranges of crosslinker in each claim overlap and there is no showing of record of the criticality of the nonoverlapping portion of the ranges of the instant claims. Instant claim 21 fully encompasses claims 28 and 41 of 888563. Instant claim 26 fully encompasses claims 22 and 32 of 888563.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 4, 5, 17 and 21-29 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11, 20, 31-33, 43 and 45-47 of Application No. 10/972022. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Instant claims 1, 4, 5, 17 and 26 each fully encompass claims 11 and 20 of 972022. Instant claim 21 fully encompasses claims 31 and 43 of 972022. Instant claims 21-25 and 27-29 are anticipated by as fully encompasses claims 32, 33, 34, 35, 44, 46 and 47, respectively, of 972022 except in that the instant claims require addition of particular metal salts. Claim 31 is evidence that it would be obvious to one of ordinary skill in the art to add

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a metal salt, such as zinc oxide to the asphalt compositions recited in claims 32, 33, 34, 35, 44, 46 and 47 of 972022.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 4-8, 10, 12-14, 17, 18 and 21-29 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 7, 9, 11, 14-18 and 20-22 of Application No. 11/020774. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Instant claim 1 fully encompasses claims 1 and 7 of 020774. Instant claim 4 fully encompasses claims 2 and 7 of 020774. Instant claim 5 fully encompasses claims 3 and 11 of 020774. Instant claims 6 and 7 each fully encompass claims 1 and 7 of 020774. Instant claim 8 encompasses claims 4 and 7 of 020774 except that the ranges of crosslinking agent present differ, yet substantially overlap. Instant claims 10, 12 and 13 fully encompass claims 1, 2 and 3, respectively of 020774. Instant claim 14 encompasses claim 2 of 020774 except that the ranges of crosslinking agent present differ, yet substantially overlap. Instant claims 17 and 18 each fully encompass claim 3 of 020774. Instant claim 21 fully encompasses each of claim 9 and 18 of 020774. Instant claims 22-29 fully encompass claims 14, 15, 16, 17, 20, 21 and 22, respectively of 020774. Instant claim 29 fully encompasses each of claims 1 and 7 of 020774.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3, 4, 5, 17, 21 and 26 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 7, 9, 14 and 19 of Application No. 11/250665. Although the conflicting claims are not identical, they are not patentably distinct from each other.

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Claim 1 of 250665 recites modifying a crude fraction by addition of a metal oxide. Claim 2 thereof teaches that the emission reducing metal oxide may be zinc oxide. Claim 7 thereof teaches the "crude fraction" includes materials comprising asphalt. Thus, claim 2, at least, of 250665 anticipates instant claims 1, 5 and 26. Claim 9 of 250665 recites that the amount of metal oxide emission reducer to be added to the asphalt should fall within 0.05-2wt.%. It would have been obvious to one of ordinary skill in the art to add amounts that fall within this range, and are fully encompassed by instant claims 4 and 17, in order to obtain the optimal emissions reduction from asphalt fractions because claim 9 of 250665 recites these are effective amounts. Claim 14 of 250665 provides convincing evidence that the addition of metal oxides to crude fractions, including asphalt, reduces the sulfur (hydrogen sulfide) emissions to less than 10ppm. This range is fully encompassed by instant claims 3. Claim 16 of 250665 teaches the combination of a crude fraction, shown by claim 7 to include asphalt, and a metal oxide dispersion. Claim 19, dependent from claim 16 recites the metal oxides selected from copper, magnesium and zinc oxide. Claim 19 of 250665 therefor anticipates instant claim 21.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Brunsman whose telephone number is 571-272-1365. The examiner can normally be reached on M, W, F, Sa; 6:00-4:30.

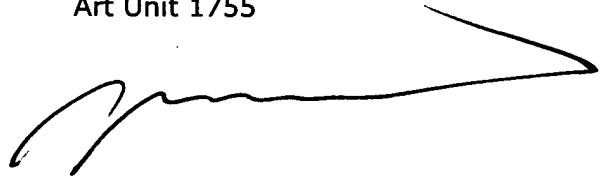
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David M Brunzman  
Primary Examiner  
Art Unit 1755

DMB

A handwritten signature in black ink, appearing to read 'David M Brunzman', with a long horizontal stroke extending to the right.